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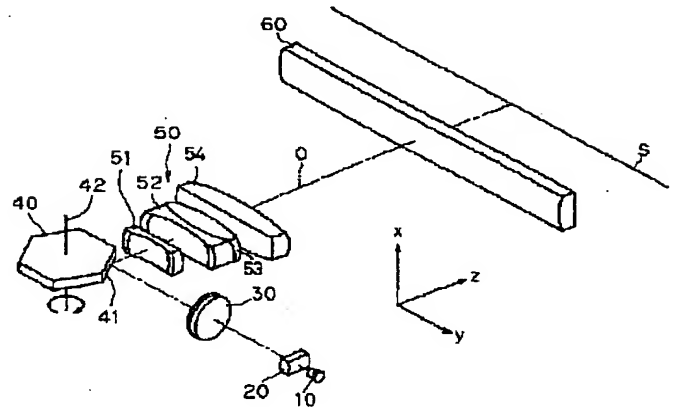
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APPLICANT : DAINIPPON SCREEN MFG CO LTD;

INVENTOR : TAMAOKI HIDEKAZU;

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TITLE : OPTICAL SCANNING DEVICE



ABSTRACT : PURPOSE: To prevent sagittal image surface curvature from occurring by using a cylindrical lens having a cylindrical surface capable of being easily processed.

CONSTITUTION: The cylindrical lens 20 converges a light beam from a semiconductor laser 10 in a subscanning direction. A collimator lens 30 collimates the light beam passing through the lens 20. A polygonal mirror 40 reflects the light beam passing through the lens 30. A f θ lens 50 converges the light beam outgoing from the mirror 40. A cylindrical lens 60 converges the light beam passing through the lens 50 in the subscanning direction again, and projects the light beam on a surface S to be scanned. In this case, the inclination angle error of a mirror surface 41 is corrected because the surface 41 and the surface S are conjugate by means of the existence of the lens 60. Since the refractive index of the lens 60 becomes small in the case of being away from an optical axis, the sagittal image surface curvature can be compensated by using the cylindrical surface capable of being comparatively easily processed.

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